



Professional Licensing Boards

Georgia Construction Industry Licensing Board

Division of Utility Contractors

Utility Manager Examination

Candidate Information Bulletin

Examination Development and Testing Unit

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The Professional Licensing Boards do not discriminate among candidates on the basis of age, gender, race, religion or national origin. The Professional Licensing Boards also do not discriminate among mentally or physically challenged candidates.

The Examination Development and Testing Unit gratefully acknowledges the assistance of other state licensing programs in the development of this candidate information bulletin. Portions of this bulletin were based on candidate information bulletins of other states.

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Introduction

The Division of Utility Contractors of the Georgia Construction Industry Licensing Board was created by the Georgia legislature to protect the public by taking steps to ensure that Utility Managers are competent in their profession. To achieve this goal, minimum standards and requirements were established by the Board for entry into the profession. Passing of the examination is one of the requirements for obtaining Utility Managers' registration.

Please review this bulletin carefully. It provides you with information you need about the Utility Manager examination.

1. Getting to the Examination

An examination admission notice will be mailed two weeks prior to the examination. The notice to scheduled applicants will give the location, date, and time of the examination. We recommend that you locate the testing site and parking locations before the morning of the examination. Allow extra time on the morning of the examination to find parking and remember that most lots do charge a fee. Parking fees vary from location to location.

2. Veterans' Preference Points

Georgia law [General Provisions Volume 30, Title 43-1-9.(1)(2)(3)] provides that veterans meeting certain conditions are eligible for the addition of five or ten percentage points to their examination scores. To qualify, veterans must have served for a minimum of one year in active duty status, and must have served during a period of conflict or war for a minimum of 90 days. The law provides that you may also qualify for veterans' preference points if you served during a period of conflict or war and if you were discharged for injury or illness incurred in the line of duty and your disability is officially rated. To apply for veterans' preference points, if you have not already submitted a DD-214 form and documentation of your disability (if applicable), you may bring a copy of this information to the examination site and turn it in to the examination proctor. Please note that the copy will not be returned to you.

At the Examination

3. What to Bring to the Examination

- A. **Admission Notice** – contains time and location of examination and the classification of the examination you will be taking.
- B. **Identification** – must bear both your picture and your signature (e.g., driver's license). If you do not have such identification, you must bring a notarized photograph of yourself.
- C. **Pencils** – do not bring pens, pencils or other writing instruments to the examination. Pencils will be provided during check-in.
- D. **Calculator** – Your calculator must be a silent, non-printing, battery operated or self-powered type. It must not be programmable and should not be a device designed for the storage and retrieval of alphabetic data (such as an electronic organizer). It should not have a keypad that has all 26 letters. You may wish to bring spare batteries for your calculator.
- E. **References** – Only reference material listed on the Suggested Reference List will be allowed in the examination room.

NOTE: Candidates are not permitted to share references or equipment during the examination. All candidates must bring their own references and equipment. Reference material may be highlighted, or underlined. References may be tabbed/indexed with permanent tabs only; post-it flags are not acceptable. Reference books may not have hand written notes or additional loose papers. If any material is downloaded from the internet, it must be bound and placed in a binder.

4. Special Accommodations for Candidates with Disabilities

The Georgia Construction Industry Licensing Board wants to ensure that all qualified individuals with a disability have the opportunity to take the Utility Manager examination.

Wheelchair access is available at all established test centers. Candidates are requested to advise the Board, in writing, at the time of application, that wheelchair access is necessary.

Qualified candidates with sensory, mental or physical disabilities that would prevent them from taking the examination under standard conditions may request special accommodations. Candidates should check the appropriate space on the "Examination Scheduling Form," and contact the Board office at the address below, to obtain the "Request for Disability Accommodation Guidelines." Application materials, including information requested in the "Guidelines," must be received by the Board by the application deadline and are available from:

Construction Industry Licensing Board
Division of Utility Contractors
237 Coliseum Drive
Macon, GA 31217-3858
(478) 207-1416

5. Visitors at the Examination Site

Visitors will not be permitted in the examination room. If you need to meet family members or other persons after the examination, you should arrange to meet in the lobby of the building in which the examination is given. Candidates will not be allowed to visit with, or exchange messages with others during the examination.

6. Conduct During the Examination

Under Board rule 121-3-.02(2), you are expected to conduct yourself in a professional manner during the examination. Any candidate engaging in conduct that subverts or attempts to subvert the examination process may be dismissed from the examination, may have scores withheld and/or declared invalid, may be disqualified from the practice of the profession, or may be subject to other Board sanctions under Board rule 121-5.

- A. You may bring and use only the reference material designated on the Reference List in the examination room.
- B. You may not bring cameras, cell-phones, tape recorders, pagers, timers, personal digital assistants (PDAs), or electronic recording or transmitting devices into the examination room. **If you do bring one of these devices, you will have to leave it outside the testing room, unattended, and the state will not assume responsibility for it. IF YOU ARE FOUND IN THE TESTING ROOM WITH ONE OF THESE, YOU WILL BE DISMISSED FROM THE EXAMINATION.**
- C. You may not take notes from the examination room.
- D. You may not remove from the examination room any examination materials.
- E. You are not to reproduce or reconstruct any portion of the examination or aid others in reproducing or reconstructing the same.
- F. The examination proctors cannot answer any questions about the content of any examination questions.
- G. You may not leave the examination room except with the examination proctor's permission. If you are permitted to leave, you may not use the time to refer to reference material. If you are permitted to leave and return, you will not be granted any extra time to complete your examination.
- H. Report to the examination room at the designated time. Seating of candidates, distribution of test materials and testing instructions will begin shortly thereafter. **ANYONE WHO ARRIVES AFTER TESTING BEGINS WILL NOT BE ADMITTED.**
- I. You may be dismissed from the examination room and/or may be denied your registration irregularities including, but not necessarily limited to:
 - 1. disrupting other candidates;
 - 2. attempting to copy answers from another candidate;
 - 3. allowing your answers to be copied;
 - 4. impersonating another examination candidate;
 - 5. failing to follow the examination proctor's instructions;
 - 6. trying to copy or remove examination materials;
 - 7. trying to use unauthorized references or materials.

7. Test-taking Skills

- A. Read all instructions carefully, and be sure you understand them. Ask questions about any instructions that are unclear.
- B. Bring a watch to the examination to use in measuring your progress through the examination. Removing your watch and placing it in view on the table may save you time since a quick time check will not require major changes in body position or eye focus.
- C. Be sure to mark an answer for all questions, even the ones about which you may be unsure. There is no penalty for guessing, and your score is based upon the total number of questions you answer correctly.
- D. For each question, select the BEST answer of the options listed. More than one choice may be partially correct, but for each question there should be only one best answer.
- E. Be sure to mark your answers on the answer sheet provided. No credit will be given for any work done in your examination booklet or answers marked in your booklet.
- F. Scratch paper will not be needed. You may perform any computations or make notes in the examination booklet.
- G. Do not make stray marks on your answer sheet. You may wish to make a note in your examination booklet next to any questions you wish to review before you turn in your examination.

8. Smoking Policy

Smoking is not allowed in the examination room or connecting restrooms.

9. Dressing for the Examination

Dress comfortably. Individuals have different temperature preferences and it is not possible for us to please everyone. We often have little control over the heating and air-conditioning in the locations we use for examinations. We recommend that you bring a sweater or jacket so that you can be comfortable in different conditions.

10. Description of the Examinations

The Utility Managers examination consists of multiple-choice questions. Please refer to the information on the following pages for the number of questions on the examination and the content categories.

Content Categories for Utility Managers

	<u>Number of Questions</u>
1. Regulations, Laws, and Administrative Functions	<u>12</u>
A. <i>Comply with Laws</i>	4
1. Workers' compensation	
2. Americans with Disability Act (ADA)	
3. Georgia Construction Industry Licensing Board	
4. State sales and use tax	
5. Business license	
B. <i>Comply with Regulations</i>	4
1. Code of Federal Regulations, Title 29, Part 1926 (OSHA)	
2. Local ordinances	
3. Utility Protection Center (UPC)	
4. Obtain necessary permits and inspections	
5. Minority Business Enterprise/Women Business Enterprise (MBE/WBE)	
6. Dewatering regulations and procedures	
7. Soil and erosion control regulations	
8. Department of Transportation (DOT)	
9. Environmental Protection Agency (EPA)	
10. HAZCOM	
11. Equal Employment Opportunity Commission (EEOC)	
12. Department of Labor (DOL)	
13. Georgia Environmental Protection Division (EPD)	
14. Georgia Environmental Facilities Authority (GEFA)	
C. <i>Comply with Administrative Requirements</i>	4
1. Bonding and liquidated damages	
2. Insurance – liability, property damage, auto, etc.	
3. Accident or incident reports	
4. Job cost estimating and bidding procedures	
5. Contracts and purchase orders	
6. Inventory equipment, materials, and supplies	
7. Determine licensing requirements for specialty and other subcontracts (electrical, blasting, etc.)	
2. Technical Functions	<u>68</u>
A. <i>Job Planning</i>	14
1. Plan and Organize Work:	
a. compile bill of materials from drawings and specifications (job takeoff)	
b. match equipment type and size to excavation requirements	
c. match supervision and labor to the job requirements	
d. analyze abilities of employees in terms of job requirements	
e. interpret pipe specifications (SDR 18, SDR 26, SDR 35, etc.)	
f. prepare and submit shop drawings	
g. schedule and manage project	
h. conduct preconstruction meeting with subcontractors	
i. interpret plans and layout project	
j. request location of existing underground utilities (UPC)	
1) document/verify location of overhead utilities	
k. identify and subcontract specialty items	
l. prepare and/or submit erosion control plan	

Number of Questions

2. Site Layout and Controls:
 - a. determine survey requirements
 - 1) verify elevations
 - 2) verify easements
 - 3) verify reference points
 - b. perform construction staking
 - 1) verify existing utility location (above and below ground)
 - 2) verify/set elevation and alignment controls

B. Job Start-Up

12

1. Equipment and Crew Mobilization:
 - a. obtain necessary permits for routing
 - b. move equipment and crew to job site
2. Material Delivery and Storage:
 - a. locate site for material delivery
 - b. verify material specifications
 - c. distribute materials on site (string out)
 - d. establish long-term storage requirements (security, deterioration, hazardous materials, etc.)

C. Line Work

14

1. Trenching and Excavation Requirements:
 - a. determine OSHA trenching and excavation requirements
 - b. analyze soil conditions and interpret requirements
 - c. determine dewatering methods
 - d. determine rock removal procedures
 - e. select shoring/sloping methods
 - f. obtain certification for shoring methods
 - g. perform excavation and trenching
 - h. perform boring and jacking, and tunneling
 2. Pipe Installation and Testing:
 - a. follow bedding requirements (Type, Class, etc.)
 - b. select line and grade procedure
 - c. install pipe to line and grade
 - d. infiltration and exfiltration
 - e. pressure testing
 - f. line sterilization
 - g. air testing
 - h. vacuum testing
 - i. video inspection
 - j. deflection testing
 - k. cathodic protection requirements
 - l. X-ray testing
 3. Back Fill and Compaction:
 - a. test soil conditions to determine method
 - b. achieve specified compaction
 - c. perform compaction test
-

Number of Questions

4. Site Restoration and Protection:
 - a. perform erosion and sediment control
 - b. pretest/restore ground/land cover according to specifications
 - c. restore asphalt and concrete paving
 - d. tree protection plan

D. <i>Concrete Work and Testing</i>	4
1. Perform form work and locate pipe sleeves, etc.	
2. Install reinforcement (rebar, etc.)	
3. Pour concrete structures	
4. Prepare test cylinders	
5. Strip forms	
6. Perform finishing operations	
7. Concrete testing	
E. <i>Process Equipment Installation and Testing</i>	4
1. Install equipment:	
a. pipe: water, sewer, gas, etc.	
b. valves and hydrants	
c. pumps	
d. treatment	
e. instrumentation	
f. flow measuring	
g. electrical	
h. manholes and other precast structures	
2. Test equipment for proper function and correct if necessary	
3. Perform plant start up and check out period	
F. <i>Safety and Quality Control Programs</i>	20
1. Employee training programs ("competent person," etc.)	
2. Provide periodic general safety meetings	
3. Monitor project safety and quality control	
4. Provide required safety equipment	
5. HAZMAT/HAZCOM	

Total Number of Test Questions	80
Additional Pre-test Questions	<u>15 per examination</u>
Total Number of Test and Pre-test Questions	95

11. Time Limits

You will have four (4) hours to complete the Utility Managers examination. This limit includes time for the 15 pre-test questions.

12. Pre-testing

The total number of questions on the examination will include pre-testing of new test questions. The number of questions used to compute your score is shown on page 6 (total number of test questions). The pre-test questions will not be used to compute your score, but will allow for the collection of statistical information on the questions. Pre-test questions will be either rewritten or included on future examinations based on the statistical information collected.

13. Question Comments

There will be space provided on the back of the answer sheet (a sample is provided at the end of this bulletin) for you to comment on the examination's content or on any of the individual questions. When commenting on a question, please be as specific as possible and provide supporting arguments. If you believe that a question is unclear, explain why this is so. Your comments will be used in determining which questions on the examination will be reviewed prior to grading.

After the Examination

14. Statistical Review of Examination Performance

After administration of the Utility Managers examination, a statistical analysis of the examination and of each question is conducted. Based on the statistics and the candidates' comments, questions that might be flawed will be reviewed by the Division. After review of the questions on the examination, the examinations are scored.

15. Difficulty Rating

The examination is developed in a manner to ensure consistency in evaluating the candidates' competency in the profession. Individual questions used on the examination are developed using a panel of licensed contractors. As each question is approved, it is assigned a difficulty rating by the panel. The difficulty rating of each question is used to determine the passing point of the examination form. In this manner, passing an examination form with more difficult questions will require a smaller

number of correct answers, while passing an examination form with less difficult questions will require a larger number of correct answers. This process of determining the passing score is referred to as the modified Angoff method.

A new examination form is created for each examination administration. When a new examination is created, it is not possible to select questions with exactly the same difficulty level as all previous examinations. Accordingly, requiring candidates to answer correctly the same number of questions in order to pass different examination forms would be unfair.

Therefore, the number of answers required to pass any given examination form will vary from one form to another, based on the difficulty of the questions. If the questions selected for one examination form are more difficult, fewer questions are required to be answered correctly to pass that examination form. For example, a candidate may be required to answer 68% of the questions correctly to pass a more difficult examination form. To pass a less difficult examination form, correct answers for 72% of the questions may be required.

16. Final Scaled Scores

To record and report scores for examination forms with different passing points in a consistent manner, the minimum passing score for each examination form is converted to a final scaled score of 70. In this manner, the minimum passing score is 70 for all examination forms, regardless of the difficulty level of the individual examination form.

In the example above, candidates who correctly answer 68% of the questions on the more difficult examination would receive a final scaled score of 70. Candidates who answer more questions correctly would receive a final scaled score proportionately higher than 70. Candidates who answer fewer questions correctly would receive a final scaled score proportionately lower than 70.

The final scaled score of 70 is required for passing any examination form. By scaling the scores based on a common passing score of 70, a candidate's performance from one examination form to another is directly comparable, the relative performance of examination forms administered from one time period to another can be evaluated, and the processing of candidate scores is fairer because the difficulty level of the individual examination forms has been controlled.

17. Score Reports

Approximately six (6) weeks after the examination, score reports will be mailed. Examination scores cannot be released over the telephone, so please do not call the Board Office for this purpose. Passing candidates will receive their examination score, while failing candidates will receive their examination score and subscores in the major examination content areas. Subscores will be provided for the examination major content areas listed in this bulletin (see page 4).

18. Examination Regrade Process

Your scores are checked many times to ensure the accuracy of your test results. The optical scanner used in scoring your test is extremely accurate, and scores close to 70 are routinely handscored. Experience has shown that it is extremely unlikely that any scoring errors will occur.

However, you may request a handscoring of your answer sheet. In the unlikely event that your score changes, the new score from the handscoring will replace your previous score, whether the score increases or decreases. You must send your request in writing, within thirty (30) days of the postmark of your examination results notice to the address given below. Please indicate the date on which you took the examination and the title of the examination you wish to be handscored. You will receive notification of the handscoring results within thirty (30) days of receipt of the request. Results of the handscoring will be final. Requests for handscoring should be sent to:

Applied Measurement Professionals, Inc.
8310 Nieman Road
Lenexa, KS 66214-1579

19. Certificate

The Board Office will mail passing candidates their certificates approximately six (6) weeks after the examination date. Any questions regarding registration should be directed to the Board Office at 237 Coliseum Drive, Macon, GA 31217-3858, (478) 207-1416.

20. Re-examination Procedure

Candidates failing the examination must retake and pass the examination in order to become registered. A new scheduling form will be sent with the score report to failing candidates. Questions about examination scheduling may be directed to

Applied Measurement Professionals, Inc.,
Candidate Services Department at 1-800-345-6559.
A current scheduling form may be obtained from the Board Office or from the Board's website at www.sos.state.ga.us.

21. Sample Questions

The following questions are intended to help you become familiar with some of the types of questions you may encounter on the examination. These sample questions do not represent the full range of content or difficulty levels contained in the actual examination.

1. An employee must miss more than how many days from work due to a work-related injury before he is eligible to receive compensation for lost wages under Georgia Worker's Compensation Law?
 - A. 1
 - B. 5
 - *C. 7
 - D. 10
2. Which of the following is **NOT** a common method of placing concrete?
 - A. Georgia buggy
 - B. crane
 - C. pumping
 - *D. bull float
3. When a contractor calls the Utility Protection Center he will be required to give which of the following information?
 - I. the time and date
 - II. the address and phone numbers of the person digging
 - III. where and when he plans to dig
 - IV. the type of excavation
 - A. III only
 - B. I and II only
 - *C. II, III, and IV only
 - D. I, II, and III only

* Correct Answer

22. Sample Answer Sheet

A sample answer sheet is included at the end of this bulletin.



APPLIED MEASUREMENT
PROFESSIONALS, INC.

ANSWER SHEET

Directions for Marking the Answer Sheet

- Use a No. 2 lead pencil. Do **NOT** use ink or ball point pen.
- Make dark marks that completely fill the circle.
- Make **NO** stray marks on the answer sheet.

A NAME (Please print clearly.)

Last Name

First Name

Middle Initial

B FIRST 4 LETTERS OF LAST NAME

C APPLICANT ID NUMBER

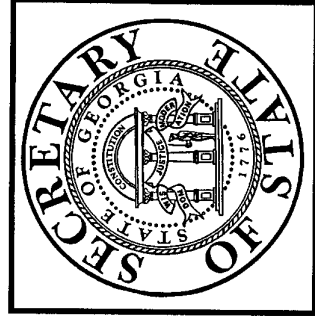
D BIRTHDAY

E HAVE YOU EVER TAKEN THIS EXAM BEFORE?

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/> Yes <input type="radio"/> No											

F TEST FORM NUMBER

G TEST CENTER NUMBER



TEST BOOKLET
NUMBER

1	(A)	(B)	(C)	(D)	41	(A)	(B)	(C)	(D)	81	(A)	(B)	(C)	(D)	121	(A)	(B)	(C)	(D)	161	(A)	(B)	(C)	(D)
2	(A)	(B)	(C)	(D)	42	(A)	(B)	(C)	(D)	82	(A)	(B)	(C)	(D)	122	(A)	(B)	(C)	(D)	162	(A)	(B)	(C)	(D)
3	(A)	(B)	(C)	(D)	43	(A)	(B)	(C)	(D)	83	(A)	(B)	(C)	(D)	123	(A)	(B)	(C)	(D)	163	(A)	(B)	(C)	(D)
4	(A)	(B)	(C)	(D)	44	(A)	(B)	(C)	(D)	84	(A)	(B)	(C)	(D)	124	(A)	(B)	(C)	(D)	164	(A)	(B)	(C)	(D)
5	(A)	(B)	(C)	(D)	45	(A)	(B)	(C)	(D)	85	(A)	(B)	(C)	(D)	125	(A)	(B)	(C)	(D)	165	(A)	(B)	(C)	(D)
6	(A)	(B)	(C)	(D)	46	(A)	(B)	(C)	(D)	86	(A)	(B)	(C)	(D)	126	(A)	(B)	(C)	(D)	166	(A)	(B)	(C)	(D)
7	(A)	(B)	(C)	(D)	47	(A)	(B)	(C)	(D)	87	(A)	(B)	(C)	(D)	127	(A)	(B)	(C)	(D)	167	(A)	(B)	(C)	(D)
8	(A)	(B)	(C)	(D)	48	(A)	(B)	(C)	(D)	88	(A)	(B)	(C)	(D)	128	(A)	(B)	(C)	(D)	168	(A)	(B)	(C)	(D)
9	(A)	(B)	(C)	(D)	49	(A)	(B)	(C)	(D)	89	(A)	(B)	(C)	(D)	129	(A)	(B)	(C)	(D)	169	(A)	(B)	(C)	(D)
10	(A)	(B)	(C)	(D)	50	(A)	(B)	(C)	(D)	90	(A)	(B)	(C)	(D)	130	(A)	(B)	(C)	(D)	170	(A)	(B)	(C)	(D)
11	(A)	(B)	(C)	(D)	51	(A)	(B)	(C)	(D)	91	(A)	(B)	(C)	(D)	131	(A)	(B)	(C)	(D)	171	(A)	(B)	(C)	(D)
12	(A)	(B)	(C)	(D)	52	(A)	(B)	(C)	(D)	92	(A)	(B)	(C)	(D)	132	(A)	(B)	(C)	(D)	172	(A)	(B)	(C)	(D)
13	(A)	(B)	(C)	(D)	53	(A)	(B)	(C)	(D)	93	(A)	(B)	(C)	(D)	133	(A)	(B)	(C)	(D)	173	(A)	(B)	(C)	(D)
14	(A)	(B)	(C)	(D)	54	(A)	(B)	(C)	(D)	94	(A)	(B)	(C)	(D)	134	(A)	(B)	(C)	(D)	174	(A)	(B)	(C)	(D)
15	(A)	(B)	(C)	(D)	55	(A)	(B)	(C)	(D)	95	(A)	(B)	(C)	(D)	135	(A)	(B)	(C)	(D)	175	(A)	(B)	(C)	(D)
16	(A)	(B)	(C)	(D)	56	(A)	(B)	(C)	(D)	96	(A)	(B)	(C)	(D)	136	(A)	(B)	(C)	(D)	176	(A)	(B)	(C)	(D)
17	(A)	(B)	(C)	(D)	57	(A)	(B)	(C)	(D)	97	(A)	(B)	(C)	(D)	137	(A)	(B)	(C)	(D)	177	(A)	(B)	(C)	(D)
18	(A)	(B)	(C)	(D)	58	(A)	(B)	(C)	(D)	98	(A)	(B)	(C)	(D)	138	(A)	(B)	(C)	(D)	178	(A)	(B)	(C)	(D)
19	(A)	(B)	(C)	(D)	59	(A)	(B)	(C)	(D)	99	(A)	(B)	(C)	(D)	139	(A)	(B)	(C)	(D)	179	(A)	(B)	(C)	(D)
20	(A)	(B)	(C)	(D)	60	(A)	(B)	(C)	(D)	100	(A)	(B)	(C)	(D)	140	(A)	(B)	(C)	(D)	180	(A)	(B)	(C)	(D)
21	(A)	(B)	(C)	(D)	61	(A)	(B)	(C)	(D)	101	(A)	(B)	(C)	(D)	141	(A)	(B)	(C)	(D)	181	(A)	(B)	(C)	(D)
22	(A)	(B)	(C)	(D)	62	(A)	(B)	(C)	(D)	102	(A)	(B)	(C)	(D)	142	(A)	(B)	(C)	(D)	182	(A)	(B)	(C)	(D)
23	(A)	(B)	(C)	(D)	63	(A)	(B)	(C)	(D)	103	(A)	(B)	(C)	(D)	143	(A)	(B)	(C)	(D)	183	(A)	(B)	(C)	(D)
24	(A)	(B)	(C)	(D)	64	(A)	(B)	(C)	(D)	104	(A)	(B)	(C)	(D)	144	(A)	(B)	(C)	(D)	184	(A)	(B)	(C)	(D)
25	(A)	(B)	(C)	(D)	65	(A)	(B)	(C)	(D)	105	(A)	(B)	(C)	(D)	145	(A)	(B)	(C)	(D)	185	(A)	(B)	(C)	(D)
26	(A)	(B)	(C)	(D)	66	(A)	(B)	(C)	(D)	106	(A)	(B)	(C)	(D)	146	(A)	(B)	(C)	(D)	186	(A)	(B)	(C)	(D)
27	(A)	(B)	(C)	(D)	67	(A)	(B)	(C)	(D)	107	(A)	(B)	(C)	(D)	147	(A)	(B)	(C)	(D)	187	(A)	(B)	(C)	(D)
28	(A)	(B)	(C)	(D)	68	(A)	(B)	(C)	(D)	108	(A)	(B)	(C)	(D)	148	(A)	(B)	(C)	(D)	188	(A)	(B)	(C)	(D)
29	(A)	(B)	(C)	(D)	69	(A)	(B)	(C)	(D)	109	(A)	(B)	(C)	(D)	149	(A)	(B)	(C)	(D)	189	(A)	(B)	(C)	(D)
30	(A)	(B)	(C)	(D)	70	(A)	(B)	(C)	(D)	110	(A)	(B)	(C)	(D)	150	(A)	(B)	(C)	(D)	190	(A)	(B)	(C)	(D)
31	(A)	(B)	(C)	(D)	71	(A)	(B)	(C)	(D)	111	(A)	(B)	(C)	(D)	151	(A)	(B)	(C)	(D)	191	(A)	(B)	(C)	(D)
32	(A)	(B)	(C)	(D)	72	(A)	(B)	(C)	(D)	112	(A)	(B)	(C)	(D)	152	(A)	(B)	(C)	(D)	192	(A)	(B)	(C)	(D)
33	(A)	(B)	(C)	(D)	73	(A)	(B)	(C)	(D)	113	(A)	(B)	(C)	(D)	153	(A)	(B)	(C)	(D)	193	(A)	(B)	(C)	(D)
34	(A)	(B)	(C)	(D)	74	(A)	(B)	(C)	(D)	114	(A)	(B)	(C)	(D)	154	(A)	(B)	(C)	(D)	194	(A)	(B)	(C)	(D)
35	(A)	(B)	(C)	(D)	75	(A)	(B)	(C)	(D)	115	(A)	(B)	(C)	(D)	155	(A)	(B)	(C)	(D)	195	(A)	(B)	(C)	(D)
36	(A)	(B)	(C)	(D)	76	(A)	(B)	(C)	(D)	116	(A)	(B)	(C)	(D)	156	(A)	(B)	(C)	(D)	196	(A)	(B)	(C)	(D)
37	(A)	(B)	(C)	(D)	77	(A)	(B)	(C)	(D)	117	(A)	(B)	(C)	(D)	157	(A)	(B)	(C)	(D)	197	(A)	(B)	(C)	(D)
38	(A)	(B)	(C)	(D)	78	(A)	(B)	(C)	(D)	118	(A)	(B)	(C)	(D)	158	(A)	(B)	(C)	(D)	198	(A)	(B)	(C)	(D)
39	(A)	(B)	(C)	(D)	79	(A)	(B)	(C)	(D)	119	(A)	(B)	(C)	(D)	159	(A)	(B)	(C)	(D)	199	(A)	(B)	(C)	(D)
40	(A)	(B)	(C)	(D)	80	(A)	(B)	(C)	(D)	120	(A)	(B)	(C)	(D)	160	(A)	(B)	(C)	(D)	200	(A)	(B)	(C)	(D)

1	0	43	0	85	0	127	0	152	0	177
2	0	44	0	86	0	128	0	153	0	178
3	0	45	0	87	0	129	0	154	0	179
4	0	46	0	88	0	130	0	155	0	180
5	0	47	0	89	0	131	0	156	0	181
6	0	48	0	90	0	132	0	157	0	182
7	0	49	0	91	0	133	0	158	0	183
8	0	50	0	92	0	134	0	159	0	184
9	0	51	0	93	0	135	0	160	0	185
10	0	52	0	94	0	136	0	161	0	186
11	0	53	0	95	0	137	0	162	0	187
12	0	54	0	96	0	138	0	163	0	188
13	0	55	0	97	0	139	0	164	0	189
14	0	56	0	98	0	140	0	165	0	190
15	0	57	0	99	0	141	0	166	0	191
16	0	58	0	100	0	142	0	167	0	192
17	0	59	0	101	0	143	0	168	0	193
18	0	60	0	102	0	144	0	169	0	194
19	0	61	0	103	0	145	0	170	0	195
20	0	62	0	104	0	146	0	171	0	196
21	0	63	0	105	0	147	0	172	0	197
22	0	64	0	106	0	148	0	173	0	198
23	0	65	0	107	0	149	0	174	0	199
24	0	66	0	108	0	150	0	175	0	200
25	0	67	0	109	0	151	0	176	0	

TESTING CONDITIONS. Questions on testing conditions are included in the test booklet. Please indicate your response to each of the questions (A through N) below by blackening Y for Yes, or N for No.

Question # _____	Question # _____
Question # _____	Question # _____
Question # _____	Question # _____
Question # _____	Question # _____